

U.S. Serial No. 10/047,072

Response to Office Action mailed March 23, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An *in vitro* method for producing stable mature dendritic cells from pluripotent cells, comprising:

a) contacting the pluripotent cells having the potential of expressing either macrophage or dendritic cell characteristics with one or more cytokines for a time sufficient to produce immature dendritic cells; and

b) ~~contacting said immature dendritic cells with a factor~~ adding a composition selected from the group consisting of peripheral blood mononuclear cell conditioned medium, monocyte conditioned medium, macrophage conditioned medium or fixed *Staphylococcus aureus* Cowan 1 strain (SACS) to the immature dendritic cells produced in step (a) and culturing the cells for a time sufficient for the immature dendritic cells to produce stable mature dendritic cells that express a characteristic of mature dendritic cells, wherein the characteristic is selected from the group consisting of increased CD83 expression, increased CD86 expression, decreased CD115 expression, and decreased CD32 expression relative to the immature dendritic cells; ~~and said factor is present in peripheral blood mononuclear cell conditioned medium, monocyte conditioned medium or macrophage conditioned medium.~~

Claim 2 (original): The method of claim 1, wherein the pluripotent cells are CD14 positive mononuclear pluripotent cells.

Claim 3 (original): The method of claim 1, wherein the pluripotent cells are peripheral blood mononuclear cells.

Claim 4 (original): The method of claim 1, wherein the pluripotent cells are monocytes.

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Claim 5 (currently amended): The method of claim 1, wherein the ~~factor~~ composition comprises GM-CSF.

Claim 6 (currently amended): The method of claim 5, wherein the ~~factor~~ composition further comprises a cytokine selected from the group consisting of IL-4; IL-13; IL-4 and IL-1 β ; IL-13 and IL-1 β ; IL-4 and TNF- α ; IL-13 and TNF- α ; IL-4, IL-1 β , and TNF- α ; IL-13, IL-1 β , and TNF- α ; IL-4 and IL-12; IL-13 and IL-12; IL-4 and stem cell factor, IL-13 and stem cell factor; IL-4 and IL-15; and IL-13 and IL-15.

Claims 7-9 (cancelled)

Claim 10 (previously presented): The method of claim 6, wherein the GM-CSF is present at a concentration of between about 200 U/ml to about 2000 U/ml.

Claim 11 (previously presented): The method of claim 1, wherein the dendritic cells express high levels of MHC class molecules.

Claim 12 (previously presented): The method of claim 1, wherein the dendritic cells have the capacity to stimulate resting T cells.